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Leptospirosis in the Asia Pacific region

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Abstract:

Background: Leptospirosis is a worldwide zoonotic infection that has been recognized for decades, but the problem of the disease has not been fully addressed, particularly in resource-poor, developing countries, where the major burden of the disease occurs. This paper presents an overview of the current situation of leptospirosis in the region. It describes the current trends in the epidemiology of leptospirosis, the existing surveillance systems, and presents the existing prevention and control programs in the Asia Pacific region. Methods: Data on leptospirosis in each member country were sought from official national organizations, international public health organizations, online articles and the scientific literature. Papers were reviewed and relevant data were extracted. Results: Leptospirosis is highly prevalent in the Asia Pacific region. Infections in developed countries arise mainly from occupational exposure, travel to endemic areas, recreational activities, or importation of domestic and wild animals, whereas outbreaks in developing countries are most frequently related to normal daily activities, over-crowding, poor sanitation and climatic conditions. Conclusion: In the Asia Pacific region, predominantly in developing countries, leptospirosis is largely a water-borne disease. Unless interventions to minimize exposure are aggressively implemented, the current global climate change will further aggravate the extent of the disease problem. Although trends indicate successful control of leptospirosis in some areas, there is no clear evidence that the disease has decreased in the last decade. The efficiency of surveillance systems and data collection varies significantly among the countries and areas within the region, leading to incomplete information in some instances. Thus, an accurate reflection of the true burden of the disease remains unknown.

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Resource Description

Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure: I

weather or climate related pathway by which climate change affects health

Ecosystem Changes

Geographic Feature: N

resource focuses on specific type of geography

Ocean/Coastal

Geographic Location: N

resource focuses on specific location

Non-United States

Non-United States: Asia, Australasia

Asian Region/Country: China, Other Asian Country

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Other Asian Country: The Maldives;Bangladesh;Nepal;Bhutan;Sri Lanka;Thailand;Myanmar;Indonesia;Timor-Leste;Philippines;Japan;Korea;Malaysia;Vietnam;Cambodia;Laos;Mongolia

Health Impact: N

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Foodborne/Waterborne Disease, Zoonotic Disease

Foodborne/Waterborne Disease: Leptospirosis

Zoonotic Disease: Other Zoonotic Disease

Zoonotic Disease (other): Leptospirosis

Intervention: N

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status, Workers

Resource Type: N

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content